

IMAGES IN SLEEP MEDICINE

Skin Pigmentation Changes in a Patient with a Sleep Disorder

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This young man presented to the sleep disorders clinic complaining of difficulty sleeping at night. Describe the skin findings in the photograph (Figure).

**What is the patient's underlying sleep disorder?
How are the skin findings and the diagnosis related?**



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Answers:

1. **Obstructive sleep apnea syndrome**
2. **Hyperpigmentation and lichenification secondary to skin irritation**

Severe obstructive sleep apnea syndrome (OSAS) afflicts this gentleman and is the indirect cause of his localized and remarkable skin changes. He was first diagnosed with OSAS in May 2000 at which time he weighed 293 pounds (BMI: 50 kg/m²). The patient was prescribed nasal continuous positive airway pressure (CPAP), but over the next 5 years his weight rose to 525 pounds (BMI: 71 kg/m²) and he found his CPAP to be less effective. He actually noted that he could only sleep by sitting upright and leaning his head against a wall.

On physical examination, his forehead demonstrated an area of prominent post-inflammatory hyper-pigmentation and lichenification. This area corresponded to the region that would rest and rub against the wall when the patient attempted to sleep.

Our patient has now been effectively reinstated on nasal CPAP but unsurprisingly his required pressure has increased from 10 to 15 cm H₂O.